

Nueces River Basin
Section 905(b) Analysis Reconnaissance Report
Executive Summary

This report summarizes opportunities for flood damage reduction, ecosystem restoration, and multipurpose projects located in the Nueces River Basin that have a justified Federal (U.S. Army Corps of Engineers) interest in being pursued for further study. Opportunities to reduce the recurring flood damages along the Nueces River and its tributaries, especially below Lake Corpus Christi, are identified for further study. Opportunities for ecosystem restoration are identified in the Texas Hill Country and the Nueces Delta and Estuary. This report summarizes innovative opportunities for regional interests to continue to meet the challenges associated with environmental sustainability, while enhancing water supplies.

Unique opportunities exist for multipurpose projects associated with the Edwards Aquifer system. The Edwards Aquifer is the primary water supply for over 1.7 million people and is one of the most prolific aquifers in the nation. Several State and Federally listed endangered and threatened species exist only in habitats created by the aquifer, springs and river segments where water is discharged from the aquifer. Structures that serve to enhance Edwards Aquifer recharge provide not only ecosystem restoration for endangered species, but improve reliability and volume of springflows in three river basins. In addition, these projects supplement the water supplies of several potential sponsors and provide flood damage reduction opportunities.

Local sponsors with interests in the projects described in this report have shown support for pursuing many of these projects through a cost-shared feasibility study with the Corps to determine whether the proposed projects are environmentally sustainable and economically feasible. Cooperation between upper and lower basin interests in the pursuit of a watershed management approach is essential to make water resource opportunities into beneficial projects for the Nueces River Basin. The Nueces River Authority has taken the initiative to submit a letter of support for this report (Appendix B) and have stated their willingness to serve as a sponsor to coordinate with other entities and pursue opportunities throughout the basin.

Projects presented in this report are consistent with the policies and regulations of the U.S. Army Corps of Engineers. Opportunities exist to develop the combination of projects

necessary to solve the water resource problems of the Nueces River Basin in an environmentally sustainable manner.